



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,921	10/11/2005	Hiroshi Nakamoto	28951-5405	6926
27890	7590	08/18/2006	EXAMINER	
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			CARTER, WILLIAM JOSEPH	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/552,921	NAKAMOTO ET AL.	
	Examiner	Art Unit	
	William J. Carter	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/11/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

Figures 11, 12, and 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 5 is objected to because of the following informalities:

In claim 5, line 3, it is believed that "the light emission surface" should be changed to "the light emission source."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2875

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5, 7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hsiung et al. (6,876,313).

With respect to claim 1, Hsiung teaches an illumination apparatus for an operating section (Fig. 1), comprising an operation part (21) provided on a panel (11) of an electronic equipment (10) and an operation knob (24) attached to the operation part (Fig. 2) so that light from a built-in light emission source (22) illuminated a rear surface of the operation knob (Fig. 2), wherein the apparatus further comprises: a light emission source (22) located above (in the present application, the term "above" is not clearly defined, and through the figures "above" is interpreted to mean above vertically if the knob was attached to a wall, this is because if the knob was laid flat then the light emission source (7) is not "above" the bearing section (1D) of the present application unless it is interpreted in this manner) a bearing section (231) of an operation knob (24); and a light guide piece (23) located between the operation knob (24) and the panel (11) to diffusively transmit light from the light emission source to illuminated the rear surface of the operation knob (Fig. 2).

As for claim 2, Hsiung teaches at least one of a shaft section (211) of the operation part (21) and a bearing section (231) of the operation knob (24) fitted around the shaft section (Fig. 2) is a transparent material (column 2, lines 26-27).

As for claim 5, Hsiung teaches a light receiving surface (bottom of 23) of the light guiding piece (23) for receiving the light from the light emission source (22) faces an

Art Unit: 2875

interior of the operation knob (Fig. 2), and an emission surface (top of 23) for emitting the light diffusively passing through the light guiding piece to front of the light guiding piece is located around the outer peripheral section (Fig. 2) of the operation knob (24).

As for claim 7, Hsiung teaches a concave is formed in the panel surface (11) to which the operation part (21) is attached (Figs. 1 and 2), and the light guiding piece (23) is placed in the concave (Fig. 2).

As for claim 9, Hsiung teaches the operation knob (24) is an operation button (column 1, lines 18-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiung in view of Weber et al. (6,092,902).

With respect to claims 4 and 6, Hsiung teaches all of the claimed elements, as discussed above, as well as teaching an outer peripheral section (top of 23) of a front surface (top of 23) of the light guiding piece (23) is a matted emission surface (top of 23). Hsiung does not explicitly teach at least one of an internal wall surface of the operation knob and a panel surface at the rear surface of the light guiding pieces is a reflection surface and a part of the light guiding piece is a reflection surface. Weber,

Art Unit: 2875

also drawn to illuminated knobs, teaches at least one of an internal wall surface (17) of the operation knob (1) is reflective (column 3, lines 47-53) and a part of a light guiding piece is a reflection surface (Abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the reflective wall surface and reflective coating of Weber on the rear surface of the light guiding piece of Hsiung, in order to protect the light guiding piece (Abstract).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiung in view of Bauer et al. (4,800,466).

With respect to claim 8, Hsiung teaches all of the claimed elements, as discussed above, except for explicitly teaching a through-hole is formed in the operation knob so that the transmitted or diffused light is emitted through the through-hole. Bauer, also drawn to illuminated knobs, teaches a through-hole (21) is formed in an operation knob (3) so that the transmitted or diffused light is emitted through the through-hole (Fig. 3). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the through-hole of Bauer in the knob of Hsiung, in order to make the knob illuminated and visible (column 4, lines 6-10).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiung and Bauer as applied to claim 8 above, and further in view of Weber.

With respect to claim 3, Hsiung and Bauer teach all of the claimed elements, as discussed above, as well as Bauer teaches a light emission source (8) provided inside a bearing section (6) of the operation knob (3). Hsiung and Bauer do not explicitly teach a shaft section of the operation part is a transparent material. Weber teaches a shaft

Art Unit: 2875

section (D1) of an operation part (2) is a transparent material (column 3, lines 23-35). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the transparent material of Weber in the shaft of Hsiung, in order to have the shaft act as a light guide (column 3, lines 23-25).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Carter whose telephone number is (571)272-0959. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2875

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wjc
08/09/06


ALI ALAVI
PRIMARY EXAMINER